

DATE: 05/11/92  
TO:  
HAMILTON, BROOK,  
PATRICIA GRANAHAN  
TWO MILITIA DR.  
LEXINGTON, MA 02173-4799

COPY OF PAPERS  
ORIGINALLY FILED



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

RECEIVED

MAY 28 1992

HAMILTON, BROOK,  
SARAH & REYNOLDS

COPY

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF  
THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS  
AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME  
NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION  
CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE  
PATENT ASSIGNMENT PROCESSING SYSTEM. IF YOU SHOULD FIND ANY ERRORS, ON  
THIS NOTICE, PLEASE SEND A REQUEST FOR CORRECTION TO: U.S. PATENT AND  
TRADEMARK OFFICE, ASSIGNMENT BRANCH, NORTH TOWER BUILDING, SUITE 10C35,  
WASHINGTON, D.C. 20231

ASSIGNOR: TRECO, DOUGLAS DOC DATE: 04/09/92

ASSIGNOR: HEARTLEIN, MICHAEL W. DOC DATE: 04/09/92

ASSIGNOR: SELDEN, RICHARD F. DOC DATE: 04/09/92

RECORDATION DATE: 04/17/92 NUMBER OF PAGES 004 REEL/FRAME 6083/0343

DIGEST :ASSIGNMENT OF ASSIGNORS INTEREST

ASSENEE:  
TRANSKARYOTIC THERAPIES, INC., A CORP. OF DE  
195 ALBANY ST.  
CAMBRIDGE, MASSACHUSETTS 02139

SERIAL NUMBER 7-789188 FILING DATE 11/05/91  
PATENT NUMBER ISSUE DATE 00/00/00



HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

TWO MILITIA DRIVE

LEXINGTON, MASSACHUSETTS 02173-4799

(617) 861-6240



DAVID E. SMITH  
JAMES M. SMITH  
LEO R. REYNOLDS  
PATRICIA GRANAHAN  
JOHN L. DUPRÉ  
MARY LOU WAKIMURA  
THOMAS O. HOOVER  
ALICE O. CARROLL  
N. SCOTT PIERCE  
KEVIN M. FARRELL  
RICHARD W. WAGNER\*  
ROBERT T. CONWAY  
RICHARD B. SMITH  
DOREEN M. HOGLE  
KELLY MCKENNEY\*\*  
LAUREN E. JENSEN\*\*\*

\*PATENT AGENT  
\*\*NY BAR ONLY  
\*\*\*PA BAR ONLY

COPY OF PAPERS  
ORIGINALLY FILED

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Honorable Commissioner of Patents and Trademarks, Washington, D.C. 20231 on 4/14/92

Hamilton, Brook, Smith & Reynolds, P.C.

*[Signature]* 4/14/92  
Signature Date

April 14, 1992

MUNROE H. HAMILTON  
(1906-1984)

OF COUNSEL  
RICHARD A. WISE

OFFICE ADMINISTRATOR  
BARBARA J. FORGUE

PATENTS, TRADEMARKS  
AND COPYRIGHTS  
TELEX 951794  
GABLE "PATENTS EXON"  
FACSIMILE: (617) 861-9640

RECEIVED  
U.S. PATENT AND TRADEMARK OFFICE  
23 APR 8 34  
RECEIVED  
U.S. PATENT AND TRADEMARK OFFICE  
23 APR 8 34

The Honorable Commissioner of  
Patents and Trademarks  
Washington, D. C. 20231

Attention: Assignment Division

Re: Applicants: Douglas Treco et al.  
Serial No.: 07/789,188  
Filed: November 5, 1991  
Title: TARGETED INTRODUCTION OF DNA  
INTO PRIMARY OR SECONDARY CELLS AND THEIR  
USE FOR GENE THERAPY  
Docket No.: TKT91-02

Sir:

Please record the enclosed Assignment for the above-referenced patent application from Douglas Treco, Michael W. Heartlein and Richard F Selden to Transkaryotic Therapies, Inc., 195 Albany Street, Cambridge, MA 02139.

Authorization is granted to charge the recordal fee of \$40.00, and any additional fee which may be due, to Applicant's Attorney's Deposit Account No. 08-0380. A duplicate copy of this letter is enclosed for accounting purposes.

Respectfully submitted,

*Patricia Granahan*  
Patricia Granahan  
Attorney for Applicants  
Registration No. 32,227

Enclosure

PG/jzg

91820700

REEL 6083 FRAME 343

Assignment

WHEREAS, we, Douglas Treco, Michael W. Heartlein and Richard F Selden have invented a certain improvement in TARGETED INTRODUCTION OF DNA INTO PRIMARY OR SECONDARY CELLS AND THEIR USE FOR GENE THERAPY described in an application for Letters Patent of the United States, Serial No. 07/789,188, filed November 5, 1991.

WHEREAS, Transkaryotic Therapies, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 195 Albany Street, Cambridge, Massachusetts 02139 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the said invention as described in said application, together with the entire right, title and interest in and to the said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful

REEL 6083 FRAME 34

documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor:

Douglas Treco

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named Douglas Treco and acknowledged that he executed the foregoing instrument as his free act and deed this 8th day of April, 1982.

(SEAL)

Frank M. Vatala Notary Public  
FRANK M. VATALA (print name)  
My Commission expires 10/04/96

REF ID: A6083 FRAME 345

Inventor:

Michael W. Heartlein  
Michael W. Heartlein

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named  
Michael W. Heartlein and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this 9th day of April, 1992.

Richard F. Selden Notary Public  
(RICHARD F. SELDEN) (print name)  
My Commission expires 10/04/96

Inventor:

Richard F. Selden  
Richard F. Selden

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named  
Richard F Selden and acknowledged that he  
executed the foregoing instrument as his free act and  
deed this 9th day of April, 1992.

Richard F. Selden Notary Public  
(RICHARD F. SELDEN) (print name)  
My Commission expires 10/04/96

RECORDED  
PATENT AND TRADEMARK  
OFFICE

APR 17 1992

REF ID: A6083 FRM 346